

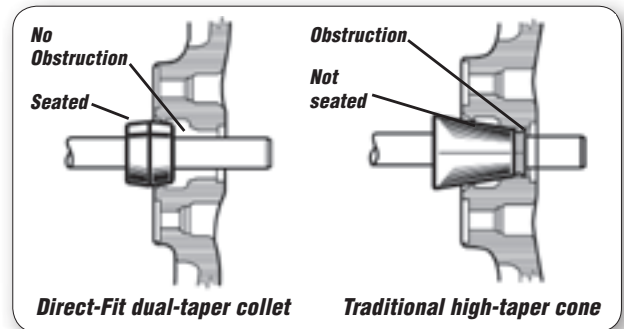
# ***Wheel Balancer Accessories***



## Why use collets?

Precise wheel balancing relies on two critical conditions: accurate center mounting and distortion-free clamping while providing wheel protection. The center of the wheel must be properly located on the balancer shaft. Hub-centric and lug-centric wheels all use the hub bore as the center locating position of the wheel. The hub bore centerline is virtually the same as the lug holes.

Traditional high-taper cones often fail to fit properly within the bore of the wheel. The actual bore of the wheel (not the bore chamfer) is where centering takes place when the wheel is mounted on a vehicle. Many modern aluminum wheel designs cannot be properly mounted with traditional cones.



*The low-taper of a direct-fit, dual-taper collet (versus the high-taper cone) offers better hub bore contact and prevents bottoming on the outer hubcap.*

## Economy collet kits

Hunter's new economy collet kits provide a superior centering performance when compared to traditional cones. Dual-sided design reduces the possibility of damage to challenging assemblies such as plastic clad wheels.

### 20-3062-1 – Basic collet kit

Kit includes:

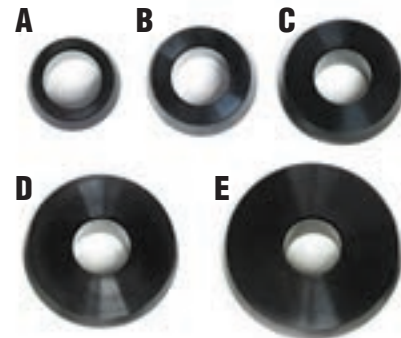
- A. 192-237-2** 2.01 in. to 2.56 in. (51 mm to 65 mm)
- B. 192-238-2** 2.47 in. to 3.05 in. (63 mm to 77 mm)
- C. 192-239-2** 2.99 in. to 3.54 in. (76 mm to 90 mm)
- D. 192-240-2** 3.68 in. to 4.31 in. (93 mm to 109 mm)
- E. 192-241-2** 4.27 in. to 4.98 in. (108 mm to 126 mm)

### 20-2989-1 – Basic collet kit with accessories

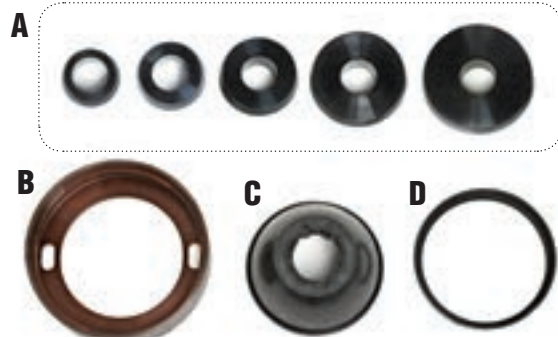
Kit includes:

- A. 20-3062-1** Basic collet kit [shown above]
- B. 46-653-2** 1.5 in. offset wheel spacer
- C. 175-392-1** 6 in. clamping cup with retainer
- D. 106-157-2** 6 in. clamping protector sleeve

20-3062-1



20-2989-1



# Premium BullsEye® collet kits

Hunter's BullsEye® kits provide comprehensive coverage for passenger-car and light-truck wheels, including 1-ton capacity. Features optional centering and wheel protection over basic cone and collet sets.

**BullsEye collets and storage are standard on Road Force Touch balancers.**

## 20-2683-1 – BullsEye® collet set

Kit includes:

- A. 192-213-1** Cone: 2.10 in. to 2.43 in. (53 mm-62 mm)
- B. 192-214-1** Cone: 2.44 in. to 2.79 in. (62 mm-71 mm)
- C. 192-215-1** Cone: 2.71 in. to 3.11 in. (69 mm-79 mm)
- D. 192-216-1** Cone: 3.05 in. to 3.42 in. (77 mm-87 mm)
- E. 192-217-1** Cone: 3.37 in. to 3.74 in. (86 mm-95 mm)
- F. 192-218-1** Cone: 3.65 in. to 4.06 in. (93 mm-103 mm)
- G. 192-219-1** Cone: 4.05 in. to 4.36 in. (103 mm-111 mm)
- H. 192-220-1** Cone: 4.32 in. to 4.70 in. (110 mm-119 mm)
- I. 192-221-1** Cone: 4.64 in. to 5.01 in. (118 mm-127 mm)
- J. 192-222-1** Cone: 4.96 in. to 5.33 in. (126 mm-135 mm)

20-2683-1



## 20-2765-1 – BullsEye collet & storage kit [SmartWeight Touch-series]

Kit includes:

- A. 175-392-1** 6 in. clamping cup
- B. 46-653-2** Performance wheel & light truck spacer
- C. 14-1470-005** Cone carrier bracket support
- D. 56-70-2** Front balancer cone carrier
- E. 20-2683-1** Passenger to 3/4 ton dual-taper collet kit
- F. 106-157-2** Protector sleeve

20-2765-1



## BullsEyePro – BullsEye Pro collet & storage kit [SmartWeight Touch-series]

This kit is the same as the BullsEye kit but includes adjustable flange plate and stud kit (20-1839-1). [Not shown, see page 5]

## 20-2747-1 – BullsEye collet & storage kit [LCD series only]

This kit includes same contents of 20-2765-1 listed above, except D is substituted with 56-78-2 (fits LCD series balancers). [Not shown.]

## 20-2750-1 – BullsEye front balancer cone carrier [LCD series only]

This kit includes the BullsEye front balancer cone carrier. [Not shown - includes C and D above.]

## 20-2739-1 Collet storage kit (Touch series only)

This kit expands the BullsEye front balancer cone carrier storage tray to hold 20 direct-fit collets. Conveniently attaches to right of standard BullsEye storage tray.

20-2739-1



# Standard balancer accessories

Touch / LCD series  
wheel balancers

## 20-2145-1 – Basic Touch/LCD accessory kit

Kit includes:

- A. 106-82-2** Sleeve, scratch guard for small cup
- B. 175-353-1** Polymer cup (4.5 in. O.D.)
- C. 76-433-3** High-torque steel wing nut\* †
- D. 221-658-2** Hammer heads (4)
- E. 46-320-2** Spacer
- F. 221-589-2** Weight hammer/pliers
- G. 223-68-1** Pressure ring
- H. 20-1650-1** Rim tags [GSP9700/RFT only] †
- I. 221-659-2** Adhesive weight scraper
- J. 65-72-2** Balance calibration weight
- K. 233-44-2** Post-cone hook plastic [Not shown.]



# DSP balancer accessories

DSP series  
wheel balancers

## 20-842-1 – Basic DSP accessory kit

Kit includes:

- A. 221-563-1** Caliper, rim width/internal diameter
- B. 214-121-2** Operational placard [DSP9200 only] †
- C. 106-82-2** Sleeve, scratch guard for 4.5 in. cup
- D. 175-353-1** Polymer cup (4.5 in. O.D.)
- E. 76-432-1** Steel wing nut
- F. 221-658-2** Hammer heads (4)
- G. 46-320-2** Spacer
- H. 221-589-2** Weight hammer/pliers
- I. 221-659-2** Adhesive weight scraper
- J. 223-68-1** Pressure ring
- K. 65-72-2** Balance calibration weight
- L. 192-86-2** Centering cone, passenger car [Not shown.]
- M. 192-89-2** Centering cone, truck [Not shown.]



\* LCD balancers may be equipped with 76-433-3 wingnut, 76-438-2 QuickNut or AutoClamp feature.

† Kit item may vary per balancer model.

# Flange plates & stud kits

## 20-1839-1 – Adjustable flange plate & stud kit

The preferred recommendation when choosing a flange plate kit for maximum application coverage. Single-plate sliding bolt circle design with interchangeable pins provides quick setup and universal fitment. The kit adapts to 3-, 4-, 5-, 6-, 7- and 8-lug bolt circles with infinite adjustability. Fits future vehicle bolt circles that have yet to be released.

The maximum bolt circle diameter is 6.70 in. (170 mm) and minimum diameter is 3.85 in. (98 mm). The kit contains much fewer pieces and is more economical than multiple flange plate kits. All pins use compressible studs allowing more accurate centering when clamping on uneven wheel lug seat surfaces. This mounting method is the most accurate of all choices.

Kit includes:

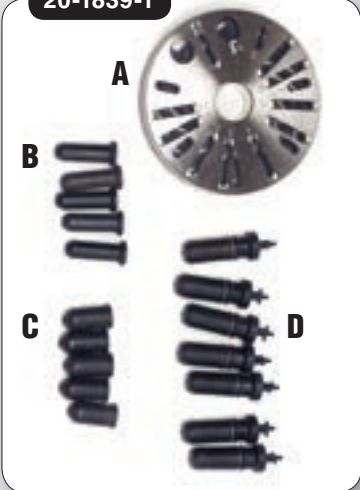
- A. 175-355-1** Adjustable flange plate with locking knob
- B. 106-145-2** Conical end pin sleeve (5), 3/4 in. diameter, 2.50 in. long
- C. 106-144-2** Spherical end pin sleeve (5), 7/8 in. diameter, 2.00 in. long
- D. 106-143-2** Conical end pin sleeve (7), 1 in. diameter, 2.00 in. long [Shown with 135-378-1 pin assemblies (7)], 1.00 in. long
- E. 20-1881-1** Pin storage rack [Not shown.]

### Optional Pin End Kits

- 20-2110-1** Pin end kit - Long 3/4 in. O.D., set of five pins (106-150-2) used with adjustable flange plate (not included in 20-1839-1). Depending on wheel offset and width, these pins may only be compatible when used with the GSP/DSP9200 series wheel balancers. 3.25 in. long.
- 20-2111-1** Pin end kit - spherical end, set of five pins (106-149-2) used with adjustable flange plate (not included in 20-1839-1). Depending on wheel offset and width, these pins may only be compatible when used with the GSP/DSP9200 series wheel balancers. 3.25 in. long.



20-1839-1



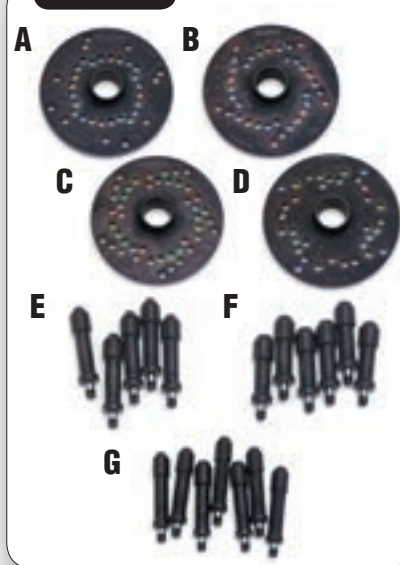
## 20-2123-2 – Fixed flange plate & stud kit

Wheel bolt circles are defined in a fixed flange plate kit. Kit consists of 4 flange plates in 4-, 5-, 6-, 7- and 8-lug bolt circles with three sets of added plug-in studs. No storage provided.

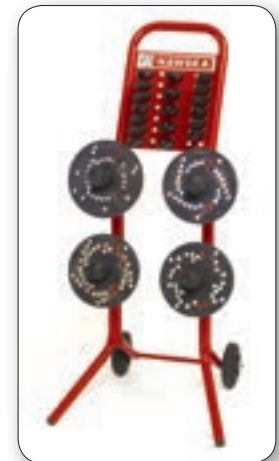
Kit includes:

- A.175-385-2\*** Bolt patterns include 4 x 3.75 in, 4 x 98 mm, 4 x 100 mm, 4 x 4.00 in, 4 x 108 mm, 4 x 4.50 in, 7 x 150 mm and 8 (4) x 170 mm
- B.175-386-2\*** Bolt patterns include 5 x 98 mm, 5 x 102 mm, 5 x 108 mm, 5 x 110 mm, 5 x 115 mm, 5 x 4.75 in, 5 x 135 mm and 6 (3) x 6.10 in
- C.175-387-2\*** Bolt patterns include 5 x 100 mm, 5 x 112 mm, 5 x 4.50", 5 x 120 mm, 5 x 5.00", 5 x 127 mm, 5 x 130 mm, 5 x 5.50", 5 x 150 mm and 5 x 6.50 in
- D.175-388-2\*** Bolt patterns include 6 (3) x 98 mm, 6 (3) x 112 mm, 6 (3) x 4.50 in, 6 (3) x 115 mm, 6 (3) x 5.00 in, 6 (3) x 127 mm, 6 (3) x 135 mm, 6 (3) x 5.50 in, 8 (4) x 6.50 in, 6 (3) x 120 mm, 6 (3) x 130 mm, and 6 (3) 132 mm
- E.175-389-2** Stud II plug in - 80 mm w/ tapered head.
- F.175-390-2** Stud III plug in - 90 mm w/ round head.
- G.175-391-2** Stud V plug in - 100 mm w/ tapered head.

20-2123-2



## 20-2124-2 – Trolley for flange plate storage



Flange plates and studs shown are not included with trolley

\* Does not include plug-in stud kits. Part numbers for identification only, not available individually.

## Cups, pressure rings & spacers



### 175-353-1 – Cup

4.5 in. clamping cup with notchless design, fits aluminum wing nuts (76-371-3 and 76-373-3), forged steel wing nuts (76-432-1 and 76-433-3), QuickNut (76-438-2), and AutoClamp feature.



### 175-316-1 – Cup

4.5 in. clamping cup with dual notched design fits recessed wheel bores on aluminum wheels and aluminum wing nuts (76-390-1, 76-371-3 and 76-373-3), forged steel wing nuts (76-432-1 and 76-433-3), QuickNut (76-438-2), and AutoClamp feature.



### 175-217-1 – Cup

4.75 in. clamping cup fits Quick Clamp pro-grip kits and early cast iron GSP9700 wing nut (76-348-3).



### 175-159-1 – Cup

4.5 in. clamping cup fits early DSP wing nut (76-255).



### 106-82-2 – Protector sleeve

Fits all 4.5 in. cups to protect finished wheel surfaces when using a cup to clamp.



### 106-157-2 – Protector sleeve

Fits all 6 in. cups to protect finished wheel surfaces when using a cup to clamp.



### 175-392-1 – Cup

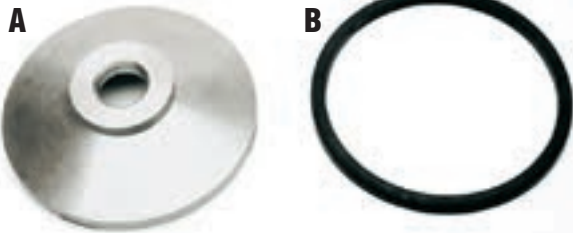
6 in. clamping cup fits aluminum wing nut (76-390-1), forged steel wing nuts (76-432-1 and 76-433-3), QuickNut (76-438-2), and AutoClamp feature.



### 46-309-2 Extra large truck cone wheel spacer

(8.00 in. O.D. x 6.30 in. I.D. x 1.53 in.) For use when front-cone mounting Extra Large Truck Cone, 192-92-2.

175-324-1



### 175-324-1 Cup with sleeve

9.0 in. alloy wheel clamping cup with replaceable protector sleeve.

Kit includes:

- A. 175-296-2** Clamp cup
- B. 106-127-2** ALU protective sleeve



### 46-653-2 Performance wheel & light-truck spacer

(7.89 in. O.D. x 5.25 in. I.D. x 1.5 in.) Allows proper offset mounting of wide performance wheels.

Achieves balance repeatability on many domestic 3/4- and 1-ton truck rims, including "duallies."

Required for Dodge Viper rear wheels. Not compatible with the extra large truck cone (192-92-2).



### 46-320-2 – Spacer

Polymer washer increases back cone centering pressure when back cone mounting wheel bore and extreme large end of the cone is used.



### 46-511-2 – Small wheel spacer

Designed to use with wheels with small hubs such as a Mini Cooper. Reduces hub face inside diameter to 3.58 in.



### 223-53-2 – Pressure ring

Fits early GSP and Quick Clamp pro-grip wing nuts. Protects metal-to-metal contact, significantly increasing clamping force (height: 0.69 in.).



### 223-68-1 – Pressure ring

Fits both aluminum DSP and GSP wing nuts. Prevents metal-to-metal contact, significantly increasing clamping force (height: 0.97 in.).



### 76-379-2 – Threaded shaft ring

Prevents cone or collet from sliding off the balancer shaft when removing assembly from the balancer. Not recommended unless same cone is used repeatedly.

## OE Special Applications

192-152-2



*OEM-specific cones are listed below.*

- 192-131-2 Cone** (Honda - special)  
3.90 in. - 4.02 in. (99 mm-102 mm)
- 192-248-2 Cone** (Mercedes - special)  
Supports 65, 66 and 84 mm bore sizes.
- 192-147-2 Cone** (Porsche - special)  
2.69 in. - 2.94 in. (69 mm-74 mm)
- 192-148-2 Cone** (Mazda - special)  
2.57 in. - 2.94 in. (65 mm-74 mm)
- 192-152-2 Cone** (Range Rover - special)  
2.73 in. - 2.94 in. (69 mm-74 mm)



### 192-165-2 – Cone

(BMW-special) Low-taper two-step design

2.783 in. - 2.913 in. (71 mm-74 mm)  
2.200 in. - 2.279 in. (56 mm-58 mm)



### 175-379-2 – Spacer bushing

Porsche Cayenne alloy wheel mounting protector replaces the need to use a flange plate for front wheel protection while back cone mounting.

## Wing nuts



### 76-433-3 – High-torque steel wing nut

Forged steel wing nut with handles and bearing kit. Standard for RFT, SWT, RF, SW and FM balancers.



### 76-432-1 – Steel wing nut

Forged steel wing nut with no handles. Standard for DSP7705 balancers.



### 76-438-2 – QuickNut steel wing nut

Collapsing jaws allow fast clamping to standard threaded 40 mm shafts on most DSP and LCD series wheel balancers.



### 184-86-1 – AutoClamp hub

For use with any Touch series or LCD balancer that is equipped with the AutoClamp feature.



## Optional accessories



*RFT02 shown with optional HammerHead® laser system*

### HammerHead® Top-Dead-Center (TDC) clip-weight placement laser system

The HammerHead® laser projects laser lines on the rim flange for precise clip-weight application. HammerHead also includes an overhead light to illuminate the work area.

HammerHead can be ordered with Touch/LCD balancers in group configurations or as a line item add-on:

**20-2166-1** For any LCD-series balancer

**20-2892-1** For any Touch-series balancer



**221-672-1**

### Optional calibration tool

For load roller and Dataset® arms.



### 20-3101-1 – Hunter wheel lift system

Wheel lift system helps technicians safely service today's oversized, light-truck and medium-duty wheels. Compliant platform permits easy alignment and improves centering.



### 20-2143-1 – Printer kit with storage shelf\*

Ink jet color printer and side storage support kit

\* Printer model may vary.

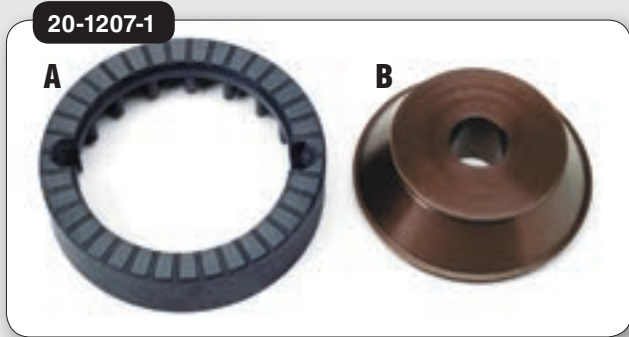
## Basic cone kit

### 20-1207-1 – Large truck cone & spacer kit

Used when mounting single or dual truck wheels such as the Ford and GM 19.5 in. Accuride wheel.

Kit includes:

- A. 46-309-2** Wheel spacer 8.00 in. O.D. x 6.30 in. I.D. x 1.53 in. (127 mm-168 mm) [See page 7 for details.]
- B. 192-92-2** Extra large truck cone 5 to 6.63 in. and 6.68 in. to 6.94 in. (170 mm-176 mm) used for extra large light trucks and motor homes.



## Premium collet kit

### 20-3116-1 – Medium-duty centering kit\*

The new medium-duty collet kit provides unmatched centering. Handles vehicles from an F-250 up to a vehicle with 19.5 in. wheels.

Kit includes:

- A. 46-748-2** Back plate
- B. 51-2912-2** Centering adaptor
- C. 192-245-2** Hub pilot disc
- D. 192-246-2** Hub pilot disc
- E. 192-244-2** Hub pilot disc
- F. 76-464-2** Knurled nut
- G. 135-601-2** Plug-in, conical stud (90 mm length)
- H. 135-582-2** Fixed, conical stud (35 mm)



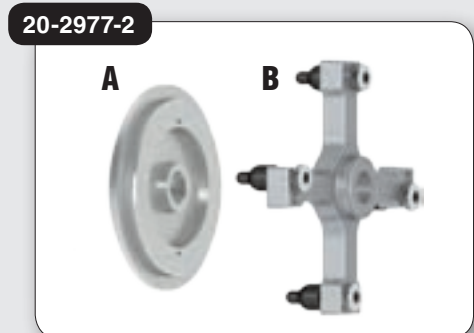
## Specialty bore kit

### 20-2977-2 – Large bore, 8-lug 19.5 stud kit

Perfect fit for medium-duty trucks with an 8.7 inch bore.

Kit includes:

- A. 192-242-2** Centering ring, 200 mm
- B. 175-397-2** Adaptor - 4 arm clamp star MD
- 175-420-2** Pin HD steel (4)
- 76-463-2** Nut - knurled HD M16 (4)



\* Large bore, 8-lug, 19.5 in. wheels are handled by kit 20-2977-2.

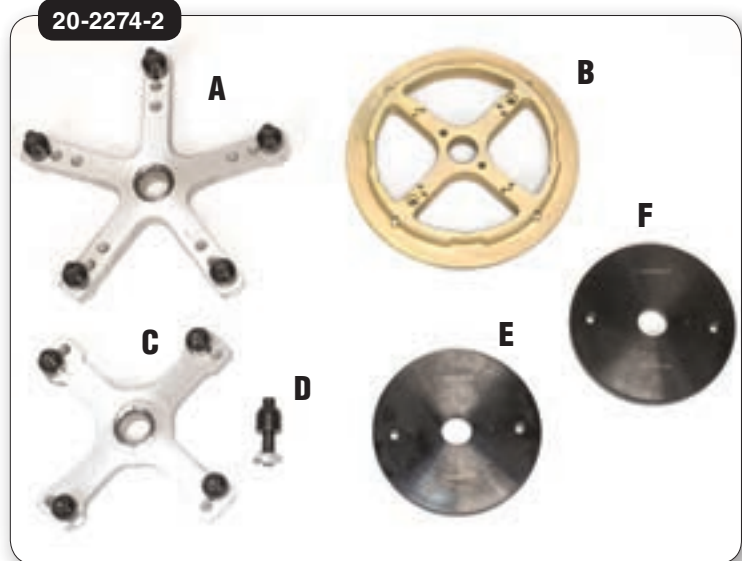
### 20-2274-2 – Truck / bus adaptor kit

Kit includes:

- A. 175-396-2** Adaptor - 5 arm clamp star
- 175-394-2** Pin HD steel (5)
- 76-463-2** Nut - knurled HD M16 (5)
- B. 175-393-2** Adaptor - wheel support HD  
(also supports 281 mm bore size)
- C. 175-397-2** Adaptor - 4 arm clamp star MD
- D. 175-420-2** Pin HD steel (5)
- E. 192-182-2** Cone - HD 219.9 mm
- F. 192-181-2** Cone - HD 220.8 mm

Not shown:

- 74-418-2** SHCS - 3/8 - 16 X 2.00 BO (2)



### 20-3155-1

**NEW!**



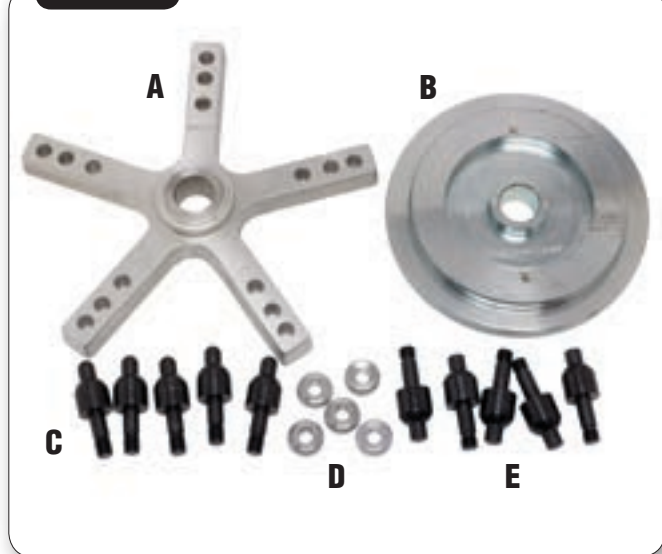
### 20-3155-1 Heavy-duty "super set" kit

This new kit provides ultimate balancer centering for the smallest passenger cars up to the largest HD trucks; coverage from KIA to Kenworth.

Kit includes:

- A.** Heavy-duty truck & bus kit
- B.** BullsEye® light-duty kit
  - BullsEye® dual-taper collet set
  - 6" cup, sleeve and spacer
  - BullsEye® collet storage
- C.** Medium-duty centering kit
- D.** 4" and 9" cups and sleeves

### 20-2761-2



### 20-2761-2 Heavy-duty "economy" kit\*

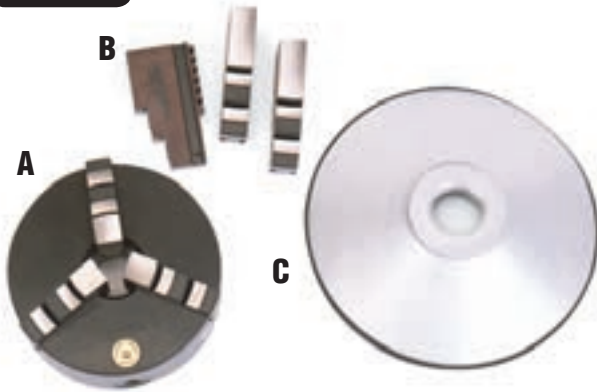
The "economy kit" is now available for HD balancing applications. This kit is a lower cost alternative for those customers only balancing 22.5 in. and 24.5 in. tractor trailer wheels. The disc used in this kit is double-sided and handles both bore sizes seen on these wheels without needing the expensive offset spacer (wagon wheel).

Kit includes:

- A. 175-396-2** Adaptor - 5 arm clamp star
- B. 192-242-2** Centering ring, 200 mm
- C. 175-420-2** Pin HD steel (5)
- D. 76-463-2** Nut - knurled HD M16 (5)
- E. 175-394-2** Pin HD steel (5)

\* This kit cannot handle the 11.45 in. bore size found on some bus wheels and motor coaches.

20-1602-1



## 20-1602-1 TruckChuck wheel and drum balancing kit\*

Three-jaw chuck adaptor for factory steel and some aluminum wheels with centering holes from 3.13 in. to 7.13 in.

Kit includes:

### A. 175-286-2 Three-jaw chuck adaptor

Shown with 20-1603-2 jaw kit.

### B. 20-1854-2 Heavy-duty extended jaw kit

For wheels with centering holes from 5.13 in. to 9.13 in.



*The TruckChuck balancing kit is used on the mounting pad side of medium-duty and light-truck wheels.*

### C. 175-296-2 Clamp cup

9 in. clamp cup shown with 106-127-2 ALU protective sleeve.

\* See Form 4632-T for complete operation instructions and additional mounting information.

Because of continuing technological advancements, specifications, models and options are subject to change without notice.

*BullsEye, HammerHead, Dataset, Road Force and Road Force Touch are registered trademarks of Hunter Engineering Company.*

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